

## Contents

<b>00 - Technical data</b> .....	<b>1</b>
<b>1 Identification</b> .....	<b>1</b>
1.1 Gearbox identification .....	1
<b>2 Safety precautions</b> .....	<b>2</b>
2.1 Safety precautions when working on vehicle .....	2
2.2 Safety precautions when working on vehicles with start/stop system .....	3
2.3 Safety precautions when using testers and measuring instruments during a road test .....	3
2.4 Notes on tow-starting and towing .....	3
<b>3 Repair instructions</b> .....	<b>4</b>
3.1 Rules for cleanliness .....	4
3.2 General notes .....	4
3.3 General repair instructions .....	5
3.4 Contact corrosion .....	7
3.5 Safety functions of gearbox control unit .....	7
<b>4 Technical data</b> .....	<b>8</b>
4.1 Allocation of gearbox to engine .....	8
4.2 Capacities .....	11
<b>30 - Clutch</b> .....	<b>14</b>
<b>1 Clutch</b> .....	<b>14</b>
1.1 Exploded view - flywheel and dual clutch .....	14
1.2 Removing and installing flywheel .....	15
1.3 Removing dual clutch .....	15
1.4 Installing dual clutch .....	15
<b>34 - Controls, housing</b> .....	<b>17</b>
<b>1 Mechatronic unit</b> .....	<b>17</b>
1.1 Exploded view - mechatronic unit .....	17
1.2 Removing and installing oil pan .....	20
1.3 Removing and installing ATF filter .....	21
1.4 Removing and installing mechatronic unit .....	22
<b>2 Selector mechanism</b> .....	<b>24</b>
2.1 Exploded view - selector mechanism .....	24
2.2 Exploded view - selector lever handle .....	26
2.3 Exploded view - selector lever cable .....	28
2.4 Checking selector mechanism .....	28
2.5 Manual release from position P .....	31
2.6 Removing and installing selector mechanism .....	32
2.7 Dismantling and assembling selector mechanism .....	38
2.8 Removing and installing selector lever handle .....	41
2.9 Removing and installing selector lever position display Y26 .....	51
2.10 Removing and installing selector lever cable .....	51
2.11 Checking and adjusting selector lever cable .....	57
2.12 Adjusting selector lever cable to basic setting .....	58
2.13 Renewing selector shaft oil seal .....	61
<b>3 Removing and installing gearbox</b> .....	<b>64</b>
3.1 Removing gearbox .....	64
3.2 Installing gearbox .....	126
3.3 Tightening torques for gearbox .....	136
<b>4 Assembly mountings</b> .....	<b>139</b>
4.1 Exploded view - assembly mountings .....	139
4.2 Removing and installing tunnel cross member .....	140



4.3	Removing and installing gearbox support with gearbox mounting	142
4.4	Removing and installing gearbox mounting	143
<b>5</b>	<b>Transporting gearbox</b>	<b>144</b>
<b>6</b>	<b>Securing to engine and gearbox support</b>	<b>145</b>
<b>7</b>	<b>ATF</b>	<b>146</b>
7.1	Exploded view - drain, filler and inspection plugs	146
7.2	Checking ATF level	146
7.3	Draining and filling ATF	149
<b>8</b>	<b>ATF circuit</b>	<b>153</b>
8.1	Exploded view - ATF circuit	153
8.2	Cleaning ATF lines	162
8.3	Removing and installing ATF lines	164
8.4	Removing and installing ATF filter	178
8.5	Removing and installing ATF filter housing and connecting piece for ATF lines	186
<b>35</b>	<b>- Gears, shafts</b>	<b>189</b>
<b>1</b>	<b>Input shaft</b>	<b>189</b>
1.1	Renewing ball bearing for input shaft	189
1.2	Renewing input shaft oil seal	189
<b>39</b>	<b>- Final drive - front differential</b>	<b>190</b>
<b>1</b>	<b>Final drive</b>	<b>190</b>
1.1	Exploded view - final drive	190
<b>2</b>	<b>Gear oil</b>	<b>192</b>
2.1	Exploded view - gear oil drain and inspection plugs	192
2.2	Checking gear oil level	193
2.3	Draining and filling gear oil	197
2.4	Removing and installing gearbox oil temperature sender 2 G754	204
<b>3</b>	<b>Oil seals</b>	<b>205</b>
3.1	Renewing oil seal (left-side)	205
3.2	Renewing oil seal (right-side)	205
<b>4</b>	<b>Differential</b>	<b>206</b>
4.1	Removing and installing flange shaft (left-side)	206
4.2	Removing and installing flange shaft (right-side)	206
<b>5</b>	<b>Centre differential</b>	<b>209</b>
5.1	Exploded view - centre differential housing	209
5.2	Removing and installing centre differential housing	213
5.3	Removing and installing rear flange shaft, oil seal and ball bearing for rear flange shaft	225
5.4	Removing and installing rear splined shaft, oil seal and ball bearing	225
5.5	Renewing oil seal for rear splined shaft	225
5.6	Pressing vibration damper onto rear splined shaft	226
5.7	Removing and installing centre differential housing	226
<b>6</b>	<b>Gearbox control system</b>	<b>227</b>
6.1	Overview of fitting locations - gearbox control system	227
6.2	Guided Functions for gearbox	231